DII.3200.RSI.2000.HP1020.UG-1

Defense Information Infrastructure (DII)

Common Operating Environment (COE)

Remote Segment Installer Segment Version 2.0.0.0

User=s Guide

(HP-UX 10.20)

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Preface

[HELVETICA FONT]	Used to indicate keys to be pressed. For example, press [RETURN].
`Courier Font`	Used to indicate entries to be typed at the keyboard, operating system commands, titles of windows and dialog boxes, file and directory names, and screen text. For example, execute the following command: `tar xvf /dev/rmt/3mn`
Italics	Used for emphasis.

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1. Introduction

The COERmtInstall tool is the Defense Information Infrastructure (DII) Common Operating Environment (COE) remote installation tool. This tool is normally selected from the System Administration menu bar as the `Remote Segment Installer` option, but it may also be invoked from the command line. The COERmtInstall tool can be used in either a "push" or a "pull" mode.

The remote installation *push* operation involves the transfer of one or more segments from the source site [e.g., Operational Support Facility (OSF)] across the network to the target site. The operator can either load the selected segments either on the network installation server or install them directly on the target machine. In the push mode, the operator is at the source site.

The remote installation *pull* operation involves an operator at the target site requesting the transfer of one or more segment install files from the source site across the network to the target site. Pull mode operation has a World Wide Web (WWW) interface intended for ease of use. The operator can either load selected segments on the network installation server or install them directly on the source machine.

1.1 Enabling the Remote Segment Installer Segment

The DII COE kernel must be loaded at the target site before the Remote Segment Installer segment can be used. The following basic setup issues must be resolved:

- **The account used when running the Remote Segment Installer must have permission to create and write to the network installation server directories (e.g., `/h/NET_SERVER`, `/home2/NET_SERVER`) and `/h/data/global/SysAdm`.** In addition, root must be able to read/write to these directories for segment to be installed remotely.

- **The network installation server directory must be shared.** The directory name must be listed in the `/etc/exports` file. If the directory is not shared, use the `Disk Manager` option to share the installation server directory. Refer to the *DII COE System Administrator's Guide (HP-UX 10.20)* for more information about using the `Disk Manager` option.

- **The working partition must be large enough to hold the necessary segment installation files**. Total disk space required is two to three times the size of the segment installation file.

1.2 Installing the Remote Segment Installer Segment

The system administrator must ensure that the system is correctly loaded with the DII COE Version 3.2.0.0 before loading the Remote Installer Version 2.0.0.0 segment. The Remote Segment Installer segment can then be installed using the `Segment Installer` option from the `Software` pull-down menu. Refer to the *DII COE Remote Segment Installer Segment Installation Guide (HP-UX 10.20)* for more information on installing the Remote Segment Installer segment.

NOTE: A Netscape segment needs to be loaded before the COERmtInstall tool can be installed. The Netscape segment is required by the Remote Segment Installer segment for graphical pull operations. For more information about the Netscape segment, refer to the Remote Segment Installer segment Requires file.

1.3 Security Measures

The COERmtInstall tool provides several security measures (e.g., encryption, passwords, anonymous FTP) to protect segment transmission and to prevent unauthorized access to the repository or a target site.

NOTE: No encryption is available for anonymous FTP. Encryption must be enabled at the source site by using a Netscape server with Secure Socket Layer (SSL) support.

1.4 Referenced Documents

The following documents are referenced in this guide:

- DII COE I&RTS:Rev 3.0, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Integration and Runtime Specification* Version 3.0, January 1997

- DII.3200.HP1020.PG-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.2.0.0 Programming Guide (HP-UX 10.20)*, July 25, 1997

- DII.3200.HP1020.AG-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.2.0.0 System Administrator=s Guide (HP-UX 10.20)*, July 25, 1997

- DII.3200.RSI.2001.HP1020.IG-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.2.0.0 Remote Segment Installer Segment Version 2.0.0.0 Installation Guide (HP-UX 10.20)*, July 25, 1997.

2. COERmtInstall Operation

2.1 Push Mode

The remote installation push operation involves the transfer of one or more segments from the *source* site [e.g., Operational Support Facility (OSF)] across the network to the *target* site. The source site can also be called the *repository* site. Segment transfer from a source to a target site in push mode is accomplished using a command line interface. In the push mode, the operator is at the source site. The operator must own a privileged account that has been given access from the target site.

STEP 1: **Log on to the source machine**. Log in with a `sysadmin` account and password at the prompts. The Common Desktop Environment (CDE) Front Panel appears at the bottom of the screen.

STEP 2: **Open a terminal emulator window**. Click on the `Application Manager` icon in the CDE Front Panel. The `Application Manager` window appears. Click on the `DII_APPS` folder, and then click on the `SA_Default` folder. Click on the `XTerm` icon. A terminal emulator window appears. When prompted, log in as `sysadmin` and enter the sysadmin password.

STEP 3: **Move to the directory containing the Remote Segment Installer**. To move to the correct directory, type the following command:

```
cd /h/RemoteInstall/bin
```

STEP 4: **Execute the command to move the file from the source machine to the target machine or server**. At the prompt, type the command to move the desired segment installation file from your machine to the target machine or server. The syntax for the command is

```
COERmtInstall <-s|-i> <hostname> <filename>
```

where `COERmtInstall` is the Remote Segment Installer tool name, `-s` and `-i` are supported parameters, `hostname` is the hostname or Internet Protocol (IP) address of the target machine, and `filename` is the full path of the segment installation file on the source machine that you wish to install. You can create the filename by using the `-o` parameter with the MakeInstall tool. For more information on running MakeInstall, see the *DII COE Programming Guide (HP-UX 10.20)*. The `-s` and `-i` parameters are mutually exclusive and may not be used to perform a pull mode segment transfer or to perform remote deinstallation. In addition, a hostname and a filename must be specified for push mode operation.

The `-s` parameter sends the designated file across the network to the target site and loads it on the network installation server only. The COEInstaller is launched on the target machine to allow the operator from the source site to load the segment on the network installation server.

The `-i` parameter sends the designated file across the network to the target site and then launches the COEInstaller tool on the target machine, allowing the operator from the source site to perform an installation on the target machine.

For example, consider installing segments contained in a file named `Netscape.tar` underneath the `/home10/ftp/pub/RemoteInstall`directory to the network installation server on a remote machine named `jdeftest.jdef`. A valid command is

```
COERmtInstall -s jdeftest.jdef /home10/ftp/pub/RemoteInstall/netscape.tar
```

STEP 5: **Enter the user name and password for the target machine**. When prompted, enter a user name and password for the target machine.

NOTE: A password is required. The operator of the remote installation push process must own a privileged account that has been given access from the target site.

STEP 6: **View the resulting messages on the screen**. After you enter a valid user name and password, a series of messages appears, such as:

```
Checking remote system type...
Attempting to get free space from remote machine...
Free Disk Space on Remote Machine == 255428 KB

Installing Segment File
[/home10/ftp/pub/RemoteInst/Netscape.tar]
This can take a while -- please be patient.

Sending file: Netscape.tar
100%  0 ====================================> 2447360 bytes.
ETA:  0:00
2447360 bytes sent in 2.19 seconds, 1.06 MB/s.

Formatting segment on remote machine...
*** Remote Install Completed ***
```

STEP 7: **Load the segments onto the network installation server or install them on the target machine**. If you plan to load the segment on the network installation server (as indicated by the `-s` parameter), the COEInstaller launches on the target machine and echoes the `Segment Installation Server`window to the source machine (Figure 1). You can then load the segment on the network installation server. If you plan to install the segment on the target machine (as indicated by the `-i` parameter), the COEInstaller launches on the target machine and echoes the `Installer` window to the source machine (Figure 2). You can then install the segment on the target machine.

Refer to the *DII COE System Administrator's Guide (HP-UX 10.20)* for more information about loading and installing segments.

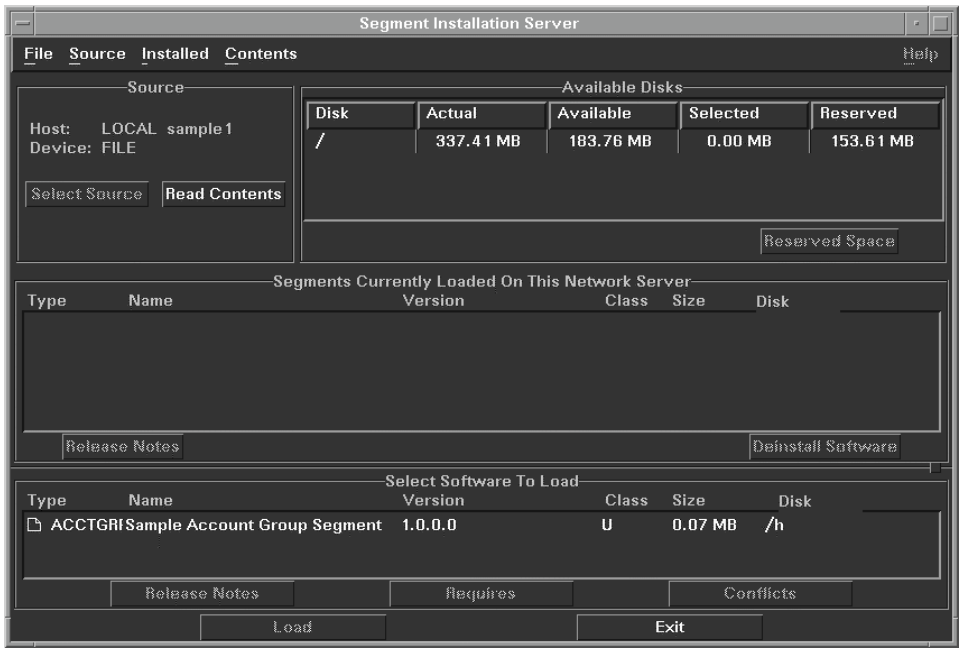

Figure 0. Segment Installation Server Window

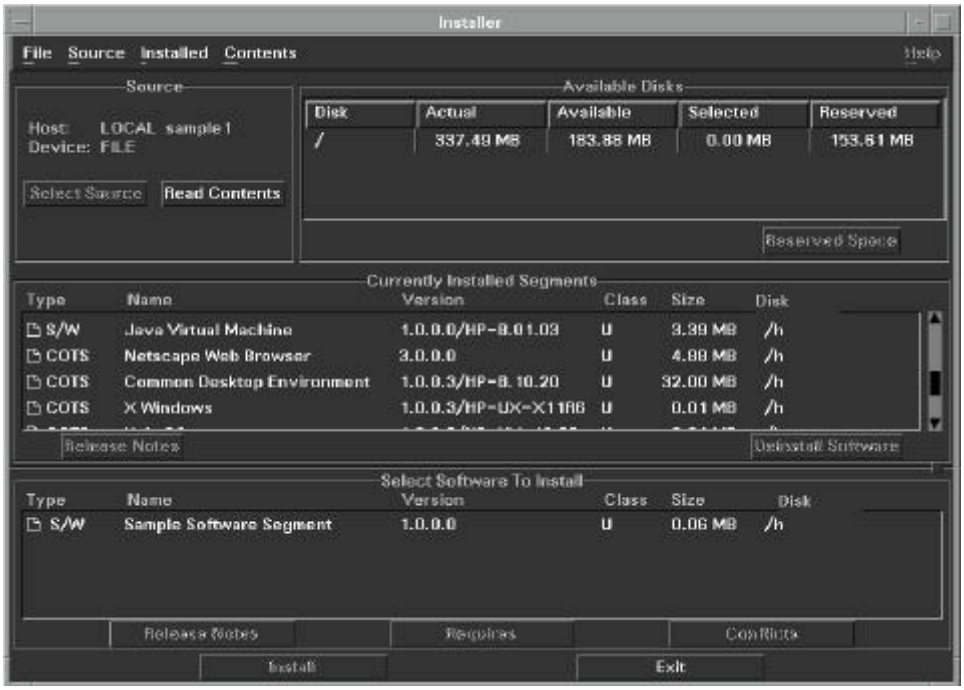

Figure 2. Installer Window

2.2 Pull Mode

The remote installation pull operation involves an operator at the target site requesting the transfer of one or more segment install files from the source site to the target site.

Pull mode operation has a WWW interface intended for ease of use.

2.2.1 Graphical Pull

Segment transfer from a source to a target site in pull mode can be accomplished using a graphical user interface (GUI). First, a WWW server must be set up on the server machine and the Netscape segment must be installed on your local workstation in order to use the GUI.

Follow the steps below to run the Remote Segment Installer to download segments in pull mode:

STEP 1: **Log on to the machine**. Log in with a `sysadmin` account and password at the prompts.

STEP 2: **Execute the Remote Segment Installer**. The System Administration menu bar appears. Select the `Remote Segment Installer` option from the `Software` pull-down menu.

NOTE: If you have just installed the Remote Segment Installer and have not yet used it, the `Remote Segment Installer` option will not appear in the `Software` pull-down menu. In order to view this option, you must first exit the CDE by clicking on the `EXIT` button in the control panel at the bottom of the screen and then log in again.

STEP 3: **View a list of hosts**. The `REMOTE INSTALL` window appears (Figure 3). The word `<NONE>` appears in the `HOST` data entry field. Click on the `HOST` button.

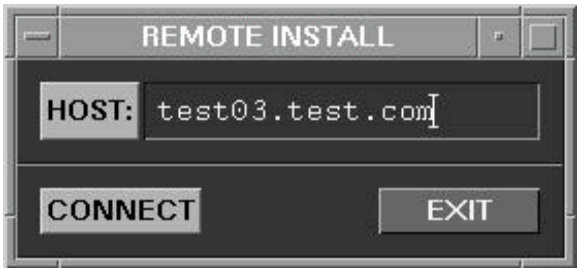

Figure 0. REMOTE INSTALL Window

NOTE: If this is the first time you have used the `Remote Segment Installer` option, you must type a valid host name or Internet Protocol (IP) address of a host machine in the `HOST` field. Each host you enter in this field will become a valid selection for future installations.

STEP 4: **Select a host**. The `SELECT HOST` window appears (Figure 4). This window displays a list of remote servers that act as hosts. Click on a host to highlight it and click on the `OK` button.

Figure 0. SELECT HOST Window

NOTE: Figure 4 shows the `Select Host` window as it appears before any machines are added as hosts. Once you have typed host names into the `HOST` data entry field of the `COERmtInstall` window (Figure 3), those host names will appear in a list in the `Select Host` window.

STEP 5: **Connect to the host**. The `REMOTE INSTALL` window reappears (Figure 3). The selected host appears in the `HOST` data entry field. Click on the `CONNECT` button. A dialog box appears stating that a connection is being made to the selected host.

STEP 6: **Accept the terms of the Netscape license agreement**. The `Netscape: License Agreement` screen appears. Click on the `Accept` button.

STEP 7: **Determine the segments for which you want information**. The `Netscape: SDMS Home Page Screen` appears, which displays the Software Distribution and Management System (Figure 5). This screen allows you to search for a specific segment file by segment name, version number, or hardware type. If you want to view all segment files, proceed to STEP 8. If you want to select particular segment files to view, type a segment name in the `Segment Name` field, type a version number in the `Version` field, or click on a hardware platform in the `Hardware` field to select it.

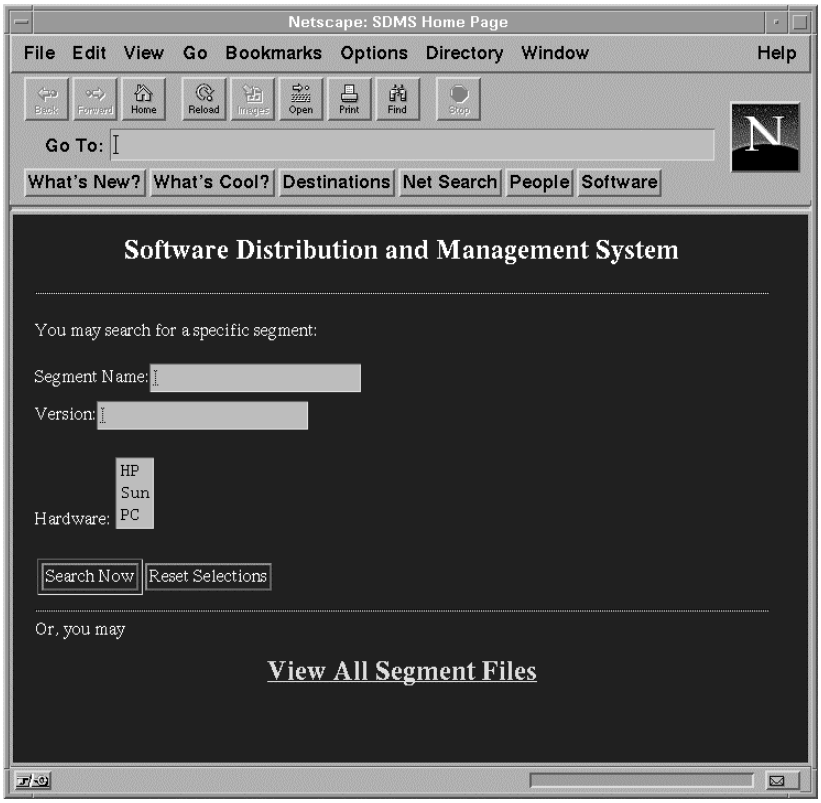

Figure 0. Netscape: SDMS Home Page Screen

NOTE: Leave a field blank to return all values for that field.

STEP 8: **Search for information about the selected segments**. Click on the `Search Now` button to search for information about segments you selected, or click on `View All Segment Files` to search for information about all segments.

STEP 9: **View information about the selected segments**. The `Netscape: Segment Catalog` screen appears (Figure 6). This screen lists segments you can download and the size of each segment (in KB). Below each listed segment are three items of information about the segment: the version number, the segment type, and the hardware type. Beside these items are links on which to click for more information about the segments: `Release Notes` for the segment release notes, `Requires` for the segment requirements, and `Conflicts` for the segment conflicts. You may also read the segment=s release notes by clicking on the segment=s name.

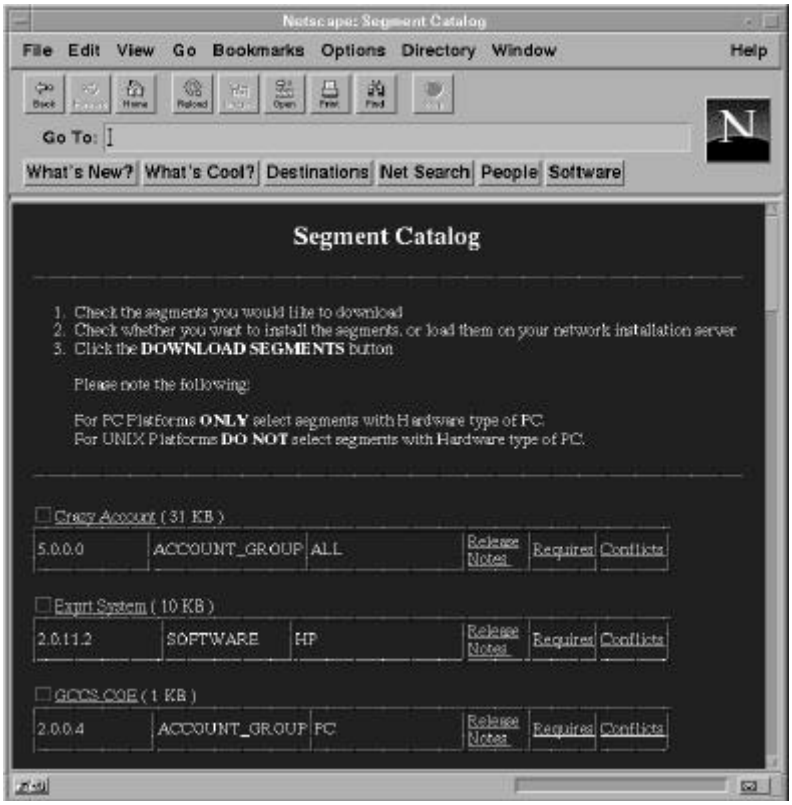

Figure 0. Netscape: Segment Catalog Screen (Top)

STEP 10: **Select the segments you want to download**. Click on the checkboxes to the left of the segments listed in the `Netscape: Segment Catalog`screen (Figure 6) that you want to download. If you have made an error selecting segments, click on a checked box again to remove the selection or click on the `DESELECT ALL SEGMENTS` button at the bottom of the page to remove all segment selections.

NOTE: Make sure the hardware platform is correct. The hardware platform for each segment is shown in the third box below the segment. Because you are downloading onto an HP platform, choose only those segments with a hardware type of HP.

STEP 11: **Determine if the selected segments will be installed on your machine or loaded on the network installation server**. Scroll to the bottom of the `Netscape: Segment Catalog` screen (Figure 7). Click on either the `LOAD NETWORK INSTALLATION SERVER` option or the `INSTALL SELECTED SEGMENTS` option.

NOTE: It is recommended that you load segments on the network installation server and then install them on the local machine by running Segment Installer from the `Software` pull-down menu. Loading segments on the network installation server allows you to install them on many machines without installing them over the wide area network (WAN) and accessing the repository machine. Loading segments on the local area network (LAN) allows for faster installations because LAN speed is faster than WAN speed.

Figure 7. Netscape: Segment Catalog Screen (Bottom)

STEP 12: **Download the selected segments**. Click on the `DOWNLOAD SEGMENTS` button.

NOTE: Segments will take between a few minutes and a few hours to download.

STEP 13: **Respond to the Netscape security warning**. Read the message in the `Netscape Security Warning` screen (Figure 8). Click on the `Show this Alert Next Time` toggle if you want the security message to appear every time you load or install a segment remotely. Then, click on the `Continue Submission` button to continue performing the load or installation.

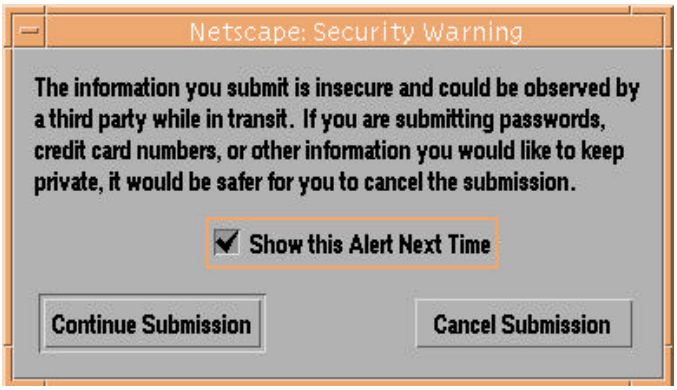

Figure 8. Netscape Security Warning Screen

STEP 14: **View the resulting window**. The `Segment Installation Server` window (Figure 1) appears if you selected the `LOAD NETWORK INSTALLATION SERVER` option. The `Installer` window (Figure 2) appears if you selected the `INSTALL SELECTED SEGMENTS` option. The `Segment Installation Server` window is the same as the window that appears when the `Segment Installation Server` option is selected from the System Administration `Software` pull-down menu, except that the `Device` is `FILE`. The `Installer` window is the same as the window that appears when the `Segment Installer` option is selected from the System Administration `Software` pull-down menu, except that the `Device` is `FILE`. The downloaded segments will appear in the `Select Software to Install` panel.

STEP 15: **Install or load the segments**. When the segment has been transferred to the target machine by the WWW server, the COEInstaller will load on the target machine. You can then load the segments on the network installation server or install them on the target machine, depending on which option you chose.

Follow the directions for loading segments onto your machine or onto the server given in the *DII COE System Administrator's Guide (HP-UX 10.20)*.

2.2.2 Command Line Pull

You can also accomplish segment transfer from a source to a target site in pull mode using a command line interface. To pull a segment using the command line interface, follow the steps below.

STEP 1: **Log on to the target machine**. Log in with a `sysadmin` account and password at the prompts. The Common Desktop Environment (CDE) Front Panel appears at the bottom of the screen.

STEP 2: **Open a terminal emulator window**. Click on the `Application Manager` icon in the CDE Front Panel. The `Application Manager` window appears. Click on the `DII_APPS` folder, and then click on the `SA_Default` folder. Click on the `XTerm` icon. A terminal emulator window appears. When prompted, log in as `sysadmin` and enter the sysadmin password.

STEP 3: **Move to the directory containing the Remote Segment Installer**. To move to correct directory, type the following command:

```
cd /h/RemoteInstall/bin
```

STEP 4: **Execute the command to pull a segment from a source machine to the target machine**. The syntax for running the command line pull Remote Segment Installer tool is

```
COERmtInstall <-g|-gi> <hostname> <filename>
```

where `COERmtInstall` is the Remote Segment Installer tool name, `-g` and `-gi` are supported parameters, `hostname` is the hostname or IP address of the source machine, and `filename` is the full path of the segment installation file that is to be installed. The `-g` and `-gi` parameters are mutually exclusive and you may not use them to perform a push mode segment transfer or to perform remote deinstallation. In addition, you must specify a hostname and a filename for pull mode operation.

The `-g` parameter sends the file across the network and launches the COEInstaller to load segments on the network installation server only.

The `-gi` parameter sends the file across the network and launches the COEInstaller to install segments on the local (target) machine.

NOTE: If no command line parameters are specified, and hostname and filename are both omitted, the tool operates in pull mode but with a GUI, as described in subsection 2.2.1, *Graphical Pull*. A window appears to prompt the user for the IP address or hostname of the repository site. A connection is then made to the repository site, if it is reachable, and a list of

segment files is displayed for selection.

STEP 5: **Load the segments onto the network installation server or install them on the source machine**. The segment file transfers across the network to the target machine. The segment installer will launch on the local machine and you can load the segments on the network installation server or install them on the local machine, depending on the command line parameters specified.

Refer to the *DII COE System Administrator's Guide (HP-UX 10.20)* for more information about loading and installing segments.

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3. Remote Deinstallation

The COERmtInstall tool also allows a source site to remove a segment remotely on a machine located at the target site. You can remotely deinstall segments by launching the target machine's COEInstaller on the target machine from the source site. Once the COEInstaller is launched, it echoes output to the source display, which allows an operator at the source site to deinstall one or more segments. Remote segment deinstallation is accomplished using a command line interface, following the steps below.

STEP 1: **Log on to the source machine**. Log in with a `sysadmin` account and password at the prompts. The Common Desktop Environment (CDE) Front Panel appears at the bottom of the screen.

STEP 2: **Open a terminal emulator window**. Click on the `Application Manager` icon in the CDE Front Panel. The `Application Manager` window appears. Click on the `DII_APPS` folder, and then click on the `SA_Default` folder. Click on the `XTerm` icon. A terminal emulator window appears. When prompted, log in as `sysadmin` and enter the sysadmin password.

STEP 3: **Move to the directory containing the Remote Segment Installer**. To move to correct directory, type the following command:

```
cd /h/RemoteInstall/bin
```

STEP 4: **Execute the command to deinstall a segment on a target machine from the source machine**. The syntax for this command is

```
COERmtInstall -l <hostname>
```

where `COERmtInstall` is the Remote Segment Installer tool name, `-l` is the supported parameter, and `hostname` is the hostname or IP address of the target host machine. Remote deinstallation does not use push or pull mode parameters. In addition, a hostname must be specified for remote deinstallation.

The `-l` parameter launches the COEInstaller on the target machine and echoes the display to the source machine.

STEP 5: **Enter the target machine user name and password**. After typing the command above, you will receive a prompt for a user account and password for the target machine.

NOTE: A password is required. The operator of the remote deinstallation process must own a privileged account that has been given access from the target site.

STEP 6: **Deinstall segments on the target machine**. COERmtInstall will launch the COEInstaller on the target machine and echo the output to the source display (see

Figure 2). At this point, the operator at the source location can install or deinstall one or more segments currently installed on the target machine.

Refer to the *DII COE System Administrator's Guide (HP-UX 10.20)* for more information about installing and deinstalling segments.